REMARKS/ARGUMENTS

Applicants have canceled claims 22-41 without prejudice or disclaimer to the subject matter contained therein. Applicants add new claims 42-61 to more particularly and distinctly claim the invention. Applicants submit that new claims 42-61 place the Application in condition for allowance and as such should be entered after final. Support for new claims 42-61 may be found in the specification as a whole and claims 1-21 specifically. No new matter has been introduced by this amendment. Even though claims 59-61 are directed to a non-elected invention, Applicants request that these claims be entered and cancellation held in abeyance until allowable subject matter is identified and rejoinder can be requested.

I. Formal Matters

The Office has objected to the Title of the invention. Applicants have amended the Title to be more descriptive.

The Office points out that the paragraph regarding Related Applications does not include the relationship of the applications. Applicants have amended the paragraph accordingly, thereby perfecting the claim to priority.

II. Rejection Under 35 U.S.C. § 102

A. Claims 22-26 and 31 have been rejected as anticipated by Pascual et al. (J. Immunol. Methods 127:263-269 (1990). Although this rejection has been rendered moot, Applicants assert that this rejection does not apply to new claims 42-46 and 51. The Office asserts that "Pascual et al. teach a monoclonal antibody that binds factor D and completely inhibits rabbit erythrocyte hemolysis by human serum as well as

prevents cleavage of C3 to C3b by cobra venom factor at a ratio of 80:1" (Office Action Page 4, first paragraph). The Office also asserts that "the claimed and referenced antibodies appear to have equivalent binding specificities."

Applicants respectfully disagree with the assertion that "the claimed and referenced antibodies appear to have equivalent binding specificities." It is well known that an antigen can have many different epitopes and these epitopes may be overlapping. The affinity of a given antibody is dependent on the epitope to which it binds and the number of contact points to which that antibody binds. For example, see Ulrich et al. and Short et al. (attached references).

If a given antibody is only capable of completely neutralizing a given antigen at a ratio of 80:1, then it is not contacting the same epitope as one that is able to neutralize the same antigen at a ratio of 1.5:1. Moreover, the Applicants have determined the epitope and contact points necessary to achieve this higher affinity. If the Pascual antibodies bound to the same epitope, they would have the same or similar binding affinity for Factor D, and it would not require a significantly higher ratio of antibody to completely inhibit the activity of Factor D. Pascual also demonstrates this fact by the isolation of 42 hybridomas, only 12 of which have any inhibitory activity and only one of which could completely inhibit Factor D and only if a significant amount of antibody was added. He makes the statement on page 266, second column, last sentence, "Indeed ELISA screening is not ideal for the production of blocking Mabs since the epitopes recognized may not be involved in the expression of enzymatic activity." This highlights the recognition that the binding epitope among the 42 hybridomas that Pascual

identified varied and he recognized that his anti-factor D antibody was "certainly not yet the best reagent." (Pascual et al. at page 268, last paragraph.)

In view of this discussion, the antibodies of the claimed invention are clearly not the same antibody as that disclosed by Pascual by virtue of their ability to bind Factor D at such a significantly different ratio and thus cannot be anticipated by the reference.

In view of this discussion, Applicants submit that Pascual et al. do not anticipate new claims 42-46 and 51.

III. Rejection Under 35 U.S.C. § 103(a)

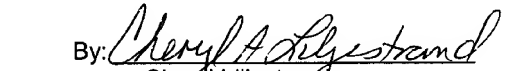
A. Claims 28 and 33 have been rejected as unpatentable over Pascual et al. (J. Immunol. Methods 127:263-269 (1990) in view of standard techniques in the art (Janeway et al.). This rejection was rendered moot by the cancellation of claims 28 and 33. However, this rejection should not apply to new claims 48 and 53 in view of the discussion above. The primary reference does not provide sufficient disclosure render new claims 48 and 53 unpatentable.

B. Claims 27, 32, and 34-35 have been rejected as unpatentable over Pascual et al. (J. Immunol. Methods 127:263-269 (1990) in view of U.S. Patent No. 5,861,156. This rejection was rendered moot by the cancellation of these claims. However, this rejection should not apply to new claims 47, 52, and 54-55 in view of the discussion above. The primary reference does not provide sufficient disclosure to render these claims unpatentable.

CONCLUSION

In view of the amendments and remarks presented above, Applicants submit that new claims 42-57 are allowable and request entry and rejoinder of claims 58-61. Claims 58-51 are of the same scope as claim 42 and therefore, also allowable.

Respectfully Submitted,

By: 
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